Correspondence.

OUR PUBLIC ROADS.

A Correspondent Who Don't Believe Convict Labor Practicable.

THE PROGRESSIVE FARMER has advocated the working of convicts on the public roads. This I believe is the only plan any newspaper has suggested. The way to get at the best plan is to "discuss it." The working of convicts on the public roads is not practicable. It is well known that convicts cannot be worked profitably on railroads in less than fifty in a gang. That they cannot be worked profitably on rail roads in a level country. The grading of a railroad in a comparatively level country would give more work on one mile than would be expended on five miles of our public roads, and as you approached the hill countries and the mountain country the work per mile would still be greater in favor of the railroads. *Convicts cannot be worked profitably except in large gangs, and in such sections as require so much work that the stockades need be seldom moved.* In one fourth of the year—say from the last of November to the last of March so much time would be lost in going to and returning from work in days and parts of days that no work could be done, and inefficient work caused by want of proper material to repair road (to say nothing of the cost of free labor to obtain and haul the material along the line of the road) the cost to the State would be greater in money than if done by free labor and free labor would willingly do it for the money.

The East has often complained that she furnished the convicts and the West received the benefit from their labor. The railroad builders of the East knew that they could build a railroad cheaper with free labor and I doubt if any railroad east of the Wilmington and Weldon ever has or ever will apply for convict labor unless their roads cross large swamps and require canaling in order to make a good road bed. Our constitution requires the State to keep charge of the convicts at all times—to divide out the convicts would require an increase of responsible officers and guards, increasing materially the expense. I am fully convinced that it would cost the State much more to work the roads by convict than by free labor. The roads of Charlotte township have for several years been worked by convict labor, that is by persons committed to jail for various offences. The Superintendent is a model and yet it is more expensive than free labor. The only reason that it is still kept up is that the prisoners have to be fed anyhow and the moral effect is "simply splendid," the chain gang being considered a greater disgrace than the Penitentiary. It is much better to hire the convicts to railroads and keep in repair our country roads with free labor. We need an *elastic* law. Some counties do not need half as much to keep up the public roads as others. A minimum and maximum power of taxation should be given to the board of magistrates. Examine the Mecklenburg law and see if it does not give each county the means to keep up the public roads.

NOTES FROM ENDERLY.

WHAT A CATAWBA FARMER THINKS.

HICKORY, N. C., Dec. 15, 1886.

EDITOR PROGRESSIVE FARMER:—"What do you think about it?" is a good way to get at it, but the bottom rail has been squeezed down so long it hardly knows any better. But wherever there's a will there's a way, and the farmers are beginning to open their eyes and see things a little clearer. The professions have had their men, and now let the farmers have some of theirs awhile.

Gov. Vance truly said that the farmers of North Carolina asked nothing of their legislators, and they got what they asked for. I tell you, not only the farmers but all others are beginning to think about it, and they will *think more about it.* The farmer is asking for a more practical system of education—not a conglomeration of the dead languages, but a pure, honest, living, practical education of the heart and hand as well as the head, and until the masses of the people learn to *know* and *feel this*, our education will in so far prove a failure. Education, as is well known, is a *power* either for good or for evil; for *good*, only so far as it is based upon the true foundation, i. e. the "*fear, love and trust* in God above all things." I think the people are about done electing professionals to multiply and mix up things so that it took half a dozen lawyers to explain it.

The editor of the PROGRESSIVE FARMER has mentioned three important matters for our representative men to think of when they go to Raleigh, and he will name more next time. Watch for 'em. Hurrah for the South Carolina farmers. She has led before, and now her farmers have started in the lead again—not in hostility this time, but in peaceful quietude—simply asking a reasonable share of the blessings of a free people.

The commissioners of Catawba county have at last made an appropriation to build a good bridge across Henry's Fork, two miles south of Hickory; the road has been graded, the work is going on, and we hope soon to see the bridge ready for the travelling public.

Mr. A. L. Bolick has opened a public school at Minerva—has 60 scholars and still they come.

The new brick church at Bethel is completed at a cost of about $1,200; this makes two new houses of worship, with a like number of school houses, built between the forks of the river during the last two or three years.

The next thing needed is a good, live Farmers' Club, and I think they will soon be ready to organize that at Minerva school house.

FARMER.

ROCKINGHAM ENDORSES.

EDITOR PROGRESSIVE FARMER:—The people of old Rockingham county most heartily endorse your position in regard to the North Carolina convicts working the public roads. Owing to the large number of rivers, creeks, hills, &c., we, as a matter of course, have the worst roads of any county east of the Blue Ridge. I have in my mind at this time road crossings, near the rivers, where twenty-five convicts could be employed two years to advantage without moving and yet be convenient to their quarters all the time. By all means let the ingoing legislature call in the convicts, who have already labored too long for railroad monopolies for nothing, and put them on the public roads. The present system has become so entirely ineffective that it does not so much as remove the loose stones from the road bed.

Respectfully,

ROCKINGHAM.

WOOL.

Consul Baker, of Buenos Ayres reports to the State Department that not only was there a considerable deficit in the wool output in that country last year but that the prospect is that the approaching clip of 1886-87 will show a further reduction of fully 75,000 bales, or about 45,000,000 pounds. He bases this opinion on the fact that the winter just passed has been the severest on cattle and sheep which has occured in several years, owing to rains early in the season, followed by severe cold later. The *Annales Rurales*, a journal devoted to the grazing interests of the Argentine Republic, estimates the losses of sheep at 12,400,000, out of the total number as shown by the last census of 69,000,000. There is much complaint there, also, of the lung worm, foot rot and scab.——In connection with these losses it should also borne in mind that the wool industry of Australia has also received a severe check during the same two seasons while many ranch sheep have been lost in our western territories. That there has been an actual and very material curtailment in the wool supply is shown by the recent advance in prices. The latest advices from the eastern and European markets show that this advance will be at least held, if not gained upon in the near future.

—In the absence of meat, potatoes may be boiled in milk, where there is plenty of the latter, and is an admirable preparation for feeding to young, growing chicks. A mixture of one-third corn meal and wheat bran with the above will make the young chicks grow wonderfully if given fresh every day. The best feed for setting hens is plenty of good, sound whole corn. They should have plenty of fresh water to drink.

Farm Notes.

BUTTER LOSING IN WEIGHT.

There are many reasons for selling butter soon after it is made. One is that, besides the natural deterioration from keeping, it is constantly losing weight. Evaporation of the moisture it contains goes on in all kinds of weather and as water goes out air fills the vacant spaces and soon makes the butter rancid.

CORN HUSK MATS.

Durable and cheap door mats are easily made from corn husks and but little art is required to braid and sew them together. They will be found valuable for many other uses besides keeping at the door. Hung up against windows in barns and stables at night they will exclude much cold and they are the most convenient protection for hot beds, both against cold at night and the glare of the sun by day.

BEANS FOR FEEDING STOCK.

It is commonly supposed that sheep are the only farm stock that will eat beans. They take to them more naturally than other animals; but even pigs can be made to eat them by mixing them with other grain and grinding. The common beans are very nutritious, but not especially fattening. English horse beans are very different, and are not so much grown as formerly, as American grown corn is taking their place.

KEEPING SHEEP TOO WARM.

Sheds protected from snow and rain are even better for sheep than the basements to barns, which are apt to be damp and too warm by the sheep lying on the manure they make during the winter. So long as the fleece is kept dry sheep will not suffer in even the coldest weather. But lying on fermenting manure makes them feverish and sometimes causes them to lose wool from their bellies where it comes in contact with the heating manure.

LIGHT BARLEY AS FEED.

Barley less than forty-six pounds per bushel is not saleable for brewing, but it makes a good feed for nearly all kinds of stock. Much of this light barley is thrown off by brewers who skim it off with oats in the process of malting. The skimmings from the malt house are a mixture of oats and light barley, weighing more than the standard weight of oats and selling for less per bushel. It makes an excellent feed for milch cows, causing them to give a large mess of milk without losing flesh. The brewers' grains after brewing are also efficacious in stimulating milk production.

WATERING COWS IN WINTER.

The dry feed usually given cows in cold weather is less stimulating to milk production than the green herbage they get at pasture. The bad effects of too dry feed are greatly intensified by a lack of water. This is especially true that where only cold water is provided. The large quantity that cows should drink chills their stomachs and retards digestion, They will not drink as much as is good for them unless the ice cold chill is taken off. The best arrangement is to have a cistern in a barn basement, where the water will not freeze, and where the cows may be sheltered from cold winds.

PROFIT IN BREEDING SOWS.

No kind of farm stock cost so little or pays so large a profit as sow pigs kept until they have their first litter of pigs. A sow due to farrow in March or April is always saleable at a handsome advance on her value for making pork. In fact, the buyer rarely looks at a sow in this condition in this light. He is busily calculating how many pigs she should have, and how much they should all weigh the subsequent November or December. And the result of these calculations is that he is generally willing to pay a price for a breeder that will require good luck and good feeding for him even to see a gain in pork.

SCORCHED GRAIN FOR FOWLS.

Corn fed to poultry in the fall and early Winter is damp and not so easily digestible as that thoroughly dried later in the season. This is one reason why fowls stop laying about the time new corn begins to be fed. Thoroughly heating corn, even to charring some of it, will remove this excessive dampness and make it more digestible. Fowls or other stock fed heavily on corn will eat charcoal as a corrective to the acid fermentation which it creates in their stomachs. As convenient a way as any is to slightly burn some of the grain with which they are fed. It may be given warn but not while hot.

MAKING A GRAPE ARBOR.

Not only every farmer but every owner of a house and lot, should plant grapes for home use. In no other way can so much pleasure and profit be got from a small space as by making an arbor and training one or more grapevines over it. If the room be limited on the ground it is well to remember when making a grape arbor that it is unlimited upward. In city lots grapevines are sometimes trained to a height of sixteen and even twenty feet. The best bunches grow at the top. The quantity of fruit from even one vine trained over an arbor will surprise any one. A well trained grapevine with foliage and fruit is as ornamental as shrubs or vines planted exclusively for their beauty.

MOULTING HENS.

The hen changes its plumage once a year, and while this process is going on egg production is necesarily suspended. The making of a new coat of feathers usually occurs in the fall after the hen has been busily engaged in laying eggs through the Summer. Unless well fed at this time cold weather comes before the the new coat is on, and there will be no eggs until spring. Otherwise with warm quarters and good feeding, hens in full feather should layin winter as well as in summer. The large fowls which looked ragged about midsummer will probably prove good winter layers, while those that produced their egg a day all through the warm weather will be worth little or nothing until spring brings their laying season again.

NOTES ON WHEAT.

Statistics show that the wheat production of the United States is something over 20 per cent of the quantity produced in the whole of Europe. The wheat crop of this country for 1882 was 504,000,000 bushels and for 1883 it was 421,000,000 bushels. The next largest wheat producer is France, which produced 346,600,000 bushels in 1882, which fell off to 285,600,000 in 1883. France never furnishes the full demand for her own consumption, but imports more or less every year. Russia comes next to France. She produced 203,000,000 bushels in 1882 but only 160,000,000 bushels in 1883. Russia with a much larger population than France produces less wheat and yet exports considerable. Her people use but little flour. The European countries next in order of production are as follows: Italy in 1883 produced 128,000,000 bushels, Spain 120,000,000 bushels, Portugal 77,000,000, Germany 72,000,000, Great Britain 69,000,000, Turkey 41,000,000, Austria 33,500,000, Belgium 21,000,000, Roumania 20,000,000.

Wheat in this country 30 years ago produced on an average nine bushels to the acre. Lately it has increased to 12 or 13, but it is still much below the average yield in England, which for many years has averaged 29 bushels to the acre. This large yield is dne to careful cultivation, more particularly in supplying the land with the proper mineral food to supply the nutriment withdrawn by the annual cropping of the same growth. But little attention is paid to that important requisite in this country. The wheat grower here as a general thing, raises continual crops of that grain so long as the land will produce a crop; then he converts his land to some other use and gives up wheat growing to his neighbor further West. It is thus that the once celebrated wheat lands of New York, Vermont and other Eastern States have been turned to other products.

A large portion of the wheat producing lands of California will not now yield one-half of what they did originally, and the time is not far distant when such lands will have to be turned to other uses unless special attention is given to a proper restoration of the the soil by mineral or other forms of dressing.—*Pacific Rural Press.*

—Under the most favorable circumstances, more than half the food consumed by our domestic animals in winter is required for the maintenance of the heat of the body; but there is no profit in the feeding which merely keeps the animal alive.

HOW TO FEED FOR MILK.

Col. Mason C. Weld has the following to say on feeding cows. It is worthy the consideration of every one who keeps cows:

"We all want a cow to do her best. What is her best? Is it to consume nearly a dollar's worth or even a dollar's worth of feed a day to secure an increase of a few ounces of butter? No. Should we not consider her as doing her best when she is fed economically—enough to enable her to hold her own and give most profit to her owner? But cows differ in so many ways that no universal ration can be recommended, not even one proportioned to the live weight. When upon grass or good hay, they may vary the amount of what they eat according to the demands of the system, but as it is well known that while for a deer or a wild cow, the varied herbage of the hillside may be a perfect ration, for a cow bred for 1,000 years to give more milk and butter than any natural wild cow gives to her calf, the ration of grass alone is not sufficient to supply all the needs of a cow giving a large quantity of rich milk. It should be supplemented by grain and phosphoric salts.

"After giving the subject considerable thought, I have come to think that one and a half per cent. of a cow's live weight may always be safely given to a healthy cow, provided one-third of it be bran. We need bran for the phosphates. Thus a 1,000 pound cow would receive daily 10 pounds of rich grain feed (say equal parts of corn, ground oats and pea meal) and 5 pounds of bran. She would eat less grain, but would probably produce greater value in quantity of butter, enough to pay for additional feed and more too. It is certain that in testing cows to show their value as economical milk and butter producers, we do not want to force them—or to train them to eat more than they can perfectly digest. The enormous tests made by some Jersey breeders have done injury to the breeds by unsettling the faith of some breeders in tests, and by causing other people to feel as if phenomenal tests were the only ones to strive for. Hence as they will not take the risk of high feeding of their cows, they make no tests at all. The 'grass only' tests have, however, been numerous and some of them excellent. The most satisfactory tests have been made with grass and a few quarts of meal or bran, much as I have indicated.—*Exchange.*

DEHORNING.

In your issue of Oct. 30th, is an article on the safety of handling bulls. I know of but one way to make a bull's horns safe, and that is to cut them off. We have begun the practice of dehorning cattle at the Wisconsin Experiment Station, commencing with a vicious six year old Jersey bull and running down to calves but a few days old. My mind is not settled on this question yet in all points but this I know, that for bulls it is best to dehorn them and then take all possible precautionary measures in addition. Be sure to dehorn the good bulls first; "good" bulls kill twice as many people every year as vicious ones. When I hear a man praising his bull's disposition I always wonder if he will leave his widow in comfortable circumstances.

To remove the horns, put the bull in a strong stanchion, fasten his head by cross pieces so he cannot move, and with a carpenter's fine saw cut the horn close to the skull. Our bull lost about a pint of blood. Use absorbent cotton, tar or whatever is at hand on the wound.

We dehorned 12 steers this week and did not apply any remedy to stop the flow of blood. The animals bled freely at first but it soon stopped.

There is a waste of human sentiment against the practice of dehorning, but better the horns come off than a human life be lost.

Of course when sawing off the horns the bull will make a fearful fight and so he must be held very firmly.—*W. A. Henry, in Pacific Rural Press.*

—For outdoor use a cheap and durable whitewash may be made by putting a peck of lime into a large tub with plenty of water to slack it. While it is slacking stir in about half a pound of lard or tallow and mix it well in. Then add hot water enough for use. This will withstand rain for years upon tool-houses and out-houses.